

Sub B1  
a1  
1. A method for decreasing serum cholesterol and increasing serum HDL in a patient comprising administering to the digestive tract of said patient an effective amount of a composition comprising a viable lactic acid-producing bacteria and a therapeutic agent selected from the group consisting of an effective amount of a cholesterol-reducing agent and a bifidogenic oligosaccharide, wherein said lactic-acid producing bacteria is *Bacillus coagulans*.

a2  
Sub B2  
12. The method of claim 11 wherein said administering comprises introducing into the digestive tract of from  $5 \times 10^8$  to  $5 \times 10^9$  viable bacteria per day.

Sub B3  
a3  
24. The method of claim 19, wherein said fiber product is selected from the group consisting of gembibrozil, fenobibrate, psyllium, bran, glucomannan and Jerusalem artichoke flour.

26. The method of claim 1 wherein said composition further comprises a cholic acid complexation agent.

a4  
Sub B4  
27. The method of claim 26 wherein said complexation agent is a salt of a metal selected from the group consisting of calcium, chromium, copper, iodine, iron, magnesium, manganese, potassium sodium, and zinc.

a5  
Sub B5  
27. A method for decreasing serum cholesterol and increasing serum HDL in a patient comprising administering to the digestive tract of said patient an effective amount of a composition comprising a viable lactic acid-producing bacteria and a therapeutic agent selected from the group consisting of an effective amount of a cholesterol-reducing agent and a bifidogenic oligosaccharide, wherein said lactic-acid producing bacteria is *Sporolactobacillus P44*.